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ABSTRACT

This paper presents the philosophy, goals and curriculum of the San Jose University Demonstration Preschool Project and presents preliminary data on the integration of mild to moderately handicapped preschool children into the program. The program, which enrolls 6 handicapped children and 14 non-handicapped children, is based on the developmental theory of Jean Piaget. The specific goals of the program are concerned with active involvement of the child through interaction with peers, manipulation of objects, and movement in space and reflection. The program is conducted in 3 types of settings: program-directed choice, teacher-directed choice and teacher directed. As part of the on-going documentation of the Demonstration Preschool, extensive observations of the children are recorded using the Coping Analysis Schedule for Educational Settings (CASES), which is specifically designed to evaluate the process of socialization. Data collected over a two-and-half-year period indicated that: (1) the dominant coping style of both handicapped and non-handicapped children in the teacher-directed setting was compliant, dependable, conforming behavior; (2) similarly, this was the dominant style of both groups in the teacher-directed choice setting. Also evident was a second style of independent, productive, self-directed behavior. In the program-directed setting both groups were characterized by independent, task-directed behavior, though handicapped children as a group were less socially integrative than their chronological, non-handicapped peers. (SS)

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A Piagetian Approach to a Mainstreamed Preschool

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This paper was presented at the annual meeting of Piaget and the Helping Professions, February 1-2 at the University of Southern California, Los Angeles.

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A Piagetian Approach to a

Mainstreamed Preschool

The San Jose State Demonstration Preschool Project was funded by the Bureau on Education for the Handicapped to begin operation in September, 1977. The project is currently in its third and final year of funding. The expressed purpose of the funding is to demonstrate the integration of mild to moderately handicapped preschool children. The purpose of this paper is to describe the philosophy, goals and curriculum of the preschool program and to present preliminary descriptive data on the integrative process.

The preschool is housed on the San Jose State University campus in the child development laboratory, located in the Home Economics Building. The program operates three hours a day, five days a week. The staff consists of a director, two head teachers, a special education consultant, a parent program coordinator, a documentation specialist and two student teachers. The ratio of adults to children is 1:5. All children range in age from three to five years.

Each year, six mild to moderately handicapped children have been enrolled with 14 non-handicapped children. Two Downs Syndrome children have been in the program since the beginning. Also enrolled throughout the last two-and-one-half years have been: a child with mild cerebral palsy, three language delayed children, two children who received shunts at birth, two developmentally delayed children, one visually handicapped child and one child considered at risk.

The preschool program is based on the developmental theory of Jean Piaget. Each child is thought of as an initiator or motivator within a carefully, preplanned environment in which each child can operate at his/her own developmental level. The goal of this interaction is the encouragement of self-directed learning for the child. The foundation for this approach is based on the

processes by which children learn as delineated by Piaget (1968). Piaget's theory does not give the teacher lesson plans or advocate what to teach (Neufeld, 1976). The focus is on how a child learns. In understanding the developmental stages of learning, the teacher can provide a meaningful learning environment for each child (Furth, 1970; Wadsworth, 1978).

In addressing the implications of his theory to the field of education, Piaget (1972) noted:

> [W]hat I've found in my research seems to me to speak in favor of an active methodology in teaching. Children should be able to do their own research. Teachers, of course, can guide them by providing appropriate materials, but the essential thing is that in order for a child to understand something, he must construct it himself, he must re-invent it. Every time we teach a child something, we keep him from inventing it himself . . . .[T]hat which we allow him to discover by himself will remain with him visibly . . . for all the rest of his life. (p.27)

In the demonstration preschool child's play in a prepared environment is seen as the modality by which children become actively involved with objects and people and explore and discover their concrete world. The specific goals of the program which support this active involvement are: interaction with peers, action on objects, movement in space and reflection.

Insert Table 1 about here

The program is divided into three major components; program-directed choice, teacher-directed choice and teacher directed. Program-directed choice comprises the majority of the schedule. During this time children are expected to choose from a variety of activities. All activities are seen as valid. Such activities

include art, easels and clay, dramatic play, large and small blocks, manipulatives, listening post, music and books. Teacher-directed choice are activities within program-directed choice which require the presence of a teacher. Children are expected to make decisions concerning how they will be involved in the activity. Such activities include cooking, gardening, science and woodworking. Teacher-directed settings include snack, story and sharing circle. During these times the children are expected and encouraged to listen and contribute to the group.

Insert Table 2 about here

The curriculum provides the frame work around which activities are planned by the teachers. A wide variety of activities structures the environment; the children are not structured in how to use the materials but rather are free to use materials within their own developmental range. Inherent in the curriculum is the natural inclination of young children to observe peer and adult models and thus modify their own use of materials.

The curriculum is planned within time and conceptual categories.

Insert Table 3 about here

These conceptual categories are integrated into the total environment. For example, the color for one week might be orange. There would be orange paint at the easels, orange playdough, orange art objects and paper, pumpkins and oranges for cooking etc. The object is not to drill children with color concepts but to expose them to a rich variety of experiences during the week.

The role of the teacher is to facilitate the child's involvement. Through active listening and motivational statements the teacher indirectly supports, guides and extends the child's activities. Within limits of safety and deport-

ment, children are expected to solve their own problems and to experience their own mistakes and successes. In general, the teacher seeks to promote internal or intrinsic reinforcement rather than to apply external reinforcers. This, however, is modified when individual children appear in need of external validation. As the academic year progresses, the children are allowed to take on more responsibility. For example, in the beginning of the year at snack time there may be three tables with a teacher at each one. As the routine of snack becomes established, one teacher will withdraw from a table, leaving it as the child-directed snack table.

Intervention by the teacher in a child's activities does occur after careful observation of the child. Such intervention is highly individualized and related to the child's ability to cope within the environment and his/her developmental level. The teacher's responsibility is then to structure that child consistently. This enables the child to operate effectively and to internalize the control and conduct which the teacher expects. This strategy applies to both the handicapped and the non-handicapped children.

As part of the on-going documentation of the Demonstration Preschool, extensive observations of the children are recorded using the Coping Analysis Schedule for Educational Settings (CASES) (Spaulding, 1978). This instrument is specifically designed for observation in educational settings to evaluate the process of socialization. The observation categories are based on ego theory and personality development. Developed over a period of seven years from over 2,000 case studies, the CASES instrument includes nineteen categories of observable behavior, ranging from aggressive to integrative to passive behavior.

Insert Table 4 about here

Within the given context of the environment, such behaviors may be appropriate or inappropriate according to cultural norms or teacher expectations. Refined empirically through individual case studies, groups of behaviors have been identified by factor analysis to reflect a coping style. Eight coping styles have been delineated (p.42):

Style A: dominative, active aggressive, annoying, bothering, controlling, manipulating

Style B: resistant, passive aggressive, delaying, peer-oriented, off task

Style C: passive, withdrawn, aviodant, dreamy

Style D: peer dependent, distractible, off task

Style E: attentive, adult oriented, compliant

Style F: assertive, socially integrative, task-oriented

Style G: appropriately task-oriented, independent, self motivated

Style H: conforming, passive, submissive to direction

A visibility threshold was empirically developed for each style so that a coefficient of 1.00 represents a point one standard deviation above the mean obtained for each style in a norming sample.

During the operation of the preschool, CASES group data are collected on all children over a period of 4 days. Five to ten children are consistently observed across all settings. Of these five to ten children, one to six may be observed at any one time, with a minimum of 25 tallies apiece.

Tables 5 to 7 show the data collected from Fall, 1977 through Spring, 1979. CASES coefficients in all styles for the handicapped and the non-handicapped have been collasped into one coefficient and displayed under the eight coping styles. Table 5 shows data.

Insert Table 5 about here

Collected in teacher-directed settings. The dominant style for both groups throughout the two and-one-half years is Style E--compliant, dependable, conforming behavior. In terms of the children's behavior in teacher directed settings, neither group is distinguishable. Table 6 displays data collected in

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Insert Table 6 about here

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teacher-directed choice settings. The dominant style for both groups throughout the two and-one-half years is Style E followed by Style G-- independent, productive, self-directed behavior. Style G is visible for both groups in three of the five time frames. In terms of the children's behavior during this setting both groups operate and particapate in a similar manner.

Table 7 displays the data collected during the program-directed choice

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Insert Table 7 about here

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settings. Style G is consistent across all time frames for both groups. With regard to independent, task-directed behavior, both groups do equally well. In three of the five time frames, Style F (socially assertive, integrative behavior) is visible for the non-handicapped but not for the handicapped. In general, the handicapped children as a group are less socially integrative than thei chronological, non-handicapped peers. This is probably accounted for not only by the developmental delays experienced by most of the handicapped children in this preschool but also by concomitant delays in verbal skills. In particular, the two Downs Syndrome children and the two developmentally-delayed children have delayed linguistic abilities.

This paper has presented the philosophy, goals and curriculum of the San Jose State University Demonstration Preschool Project. Supportive data shows

that the integration of mild to moderately handicapped preschoolers with non-handicapped preschoolers is possible. Both groups display similar styles of coping within the preschool environment. The one difference between the two groups occurs in program-directed choice settings with regard to social integrativeness. In general, these handicapped children are less socially integrative than their non-handicapped age mates.

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Table 1

San Jose State University
PRESCHOOL DEMONSTRATION MODEL

GOALS AND OBJECTIVES

INTERACTION WITH PEOPLE	ACTION ON OBJECTS	MOVEMENT IN SPACE	REFLECTION
1. Develop self-awareness and positive self image.	1. Provide opportunities to experiment and explore using their senses--visual, tactile, olfactory, hearing, etc.	1. Development and coordination of large muscle skills.	1. Symbolic, dramatic play opportunities.
2. Opportunities to engage in a balance between various forms of play: solitary, parallel, associative and cooperative.	2. Encouragement of child initiated problem solving.	2. Development of spatial relations, i.e., on top of, under, over.	2. Develop empathy and compassion for the feelings of others.
3. Develop awareness of the feelings of others	3. Develop practical life skills.	3. Understanding of temporal relations, i.e. what comes next, snack, sequence of the day.	3. Opportunities for expressive play (non-verbal).
4. Participate in teacher directed activities.	4. Facilitate development of fine motor skills.	4. Opportunities for expressive growth through movement.	4. Talking about experiences - sharing in a group.
5. Learn routines, listen and follow directions.	5. Provide experiences with classification, seriation, conservation, relationships among objects.	5. Self Discovery a. Joy in movement b. awareness of limits c. safety factors	5. Time to observe the activity of others.
	6. Extend child's logical thinking process by experience with actual objects.	6. Learning to be patient (waiting turns) and sharing of equipment.	6. Stories as an avenue for child reflection.

Table 2
San Jose State University
Preschool Demonstration Model
(Handicapped & Non-Handicapped)

Sample Daily Schedule

Time	Title of Activity	Objective of Activity
12:30-12:40	Children Arrive Teacher greets children and parents	1. Each child/parent is made to feel comfortable and welcome
12:30- 1:45	Child Selected Activities Children engage in a variety of activities including art, easel painting, playdough, cooking, water table activities, sand play, dramatic play, manipulatives, play house, gross motor activities	1. Learn to explore and manipulate materials 2. Learn concepts about the environment through the use of materials or games 3. Learn to work independently 4. Learn to share and interact effectively with peers 5. Develop fine motor coordination 6. Develop hand/eye coordination through construction games 7. Develop self-expression 8. Develop large muscle coordination
1:45- 2:00	Clean-up Children assist in putting away materials. Children also set the table for snack. Washing hands & toileting are also included at this time	1. Practice in cooperative behavior and working with peers and adults on task 2. Develop self-help skills
2:00- 2:15	Snack The focus is on creating a pleasant atmosphere for socializing and learning. The children eat the snack that they have prepared	1. Develop communication skills 2. Learn about different foods
2:15- 2:30	Story Time A story selected by the teacher is read to the children	1. Develop listening skills 2. Increase their attention span, vocabulary and concept formation 3. Learn to interact effectively in a group situation 4. Decrease of ego-centrism (learning to listen/wait)

2:30- 3:05	Child Selected Activities Easel, art, special activity, field trip, book blanket, outdoor/indoor activities. The focus is on child self-direction	(See 1-8 of Child Selected Activities 12:30- 1:45) 9. Develop cooperative social interaction 10. Develop spatial relationships 11. Develop object conservation and learn properties of objects and materials
3:05- 3:10	Clean-up Children assist in putting away materials. Prepare for large group time	2. Develop self-help skills 2. Develop cooperative behavior
3:10- 3:25	Large Group Time Singing, learning new songs, children share special toys they have brought from home	1. Learning new songs-vocabulary development 2. Learning to interact/communicate in a large group 3. A "winding-down" time to prepare to leave
3:25- 3:30	Gather art work, coats, etc.	

Table 3
Preschool Demonstration Project
Curriculum Planning Sheet

WEEK	CONCEPT	MANIPULATIVES	SHAPE	COLOR	COOKING	COOKING SKILLS	ANIMALS
Jan 14-18	Same	match shapes/ sorting	circle	white, orange brown	nuts	cracking	fish
Jan 21-25	top/bottom	sink & float	square	yellow, green orange	cereals	stirring	fish
Jan 28-Feb 1	many/few	piggy bank game	triangle	yellow, black white	breads	mixing	
Feb 4-8	same/more/less	buttons to sort	rectangle	red, white brown	dried beans	sprouting	owl
Feb 11-15	hard/soft	feely cards/ cot. ball/rock	heart	red, white, pink	rice	stirring	mice
Feb 18-22	loud/quiet	sond. cylinder beads & marbles	oval	black, brown, white	cheese	cutting	mice
Feb 25-29	heavy/light	sc.bal/grd wht rock/cot balls	star	red, white, blue	cauli./broc.	cutting	rats
Mar 3-7	cold/hot	sm jar w/hot & cold water	combination	green, white, red	lettuce, tomatoes	spreading	guinea pig
Mar 10-14	smooth/rough	text. for col-lage/sandpaper	square	black, white brown	potato	mashing	snake
Mar 17-21	in/out	cars and garages	triangle	dark and light green	pancakes	mixing	rabbit
Mar 24-28	name of self and others	name songs/ sand letters	rectangle	pastels	eggs	cracking	ants, rabbit
Mar 31-Apr 4		SPRING VACATION			SPRING VACATION		
Apr 7-11	name of body parts & funct.	drawing body/ body games	oval	red, blue, yellow, white	squash	cutting	snake
Apr 14-18	tall/short	weighing and measuring	combination	red, blue, yellow, black	apples	coring	bees
Apr 21-25	facial and facial expres.	sort people cards/draw face	circle	several shades of green & yel.	tangerines	peeling	chickens
Apr 28-May 2	between/on top of	block building	square	red, white, green	pineapple	mixing	snake
May 5-9	above/below	water play w/ boats, blocks	triangle	yellow, green white	bananas	blending	tortoise
May 12-16	wide/narrow	jars & lids assort. sizes	combination	combinations	avocado	mashing	

Table 4

The Coping Analysis Schedule for Educational Settings (CASES)

(Brief Form)

No.	Description (Abbreviated)
1	Aggressive, hurtful, destructive behavior
2	Negative attention-getting behavior
3a	Controlling others in a pro-social manner
3b	Controlling others in a self-serving manner
4	Resisting, delaying, defensive checking
5a	Appropriate self-directed, independent activity
5b	Inappropriate self-directed, independent activity
6a	Paying close attention in accordance with teacher expectations
6b	Paying close attention to events unrelated to the task at hand
7a	Integrative sharing and helping in accordance with teacher expectations
7b	Integrative sharing and helping in conflict with teacher expectations
8a	Integrative social transactions in accordance with teacher expectations
8b	Integrative social transactions in conflict with teacher expectations
9a	Integrative seeking and receiving help in line with teacher expectations
9b	Integrative seeking and receiving help in conflict with teacher expectations
10	Following directions and teacher expectations obediently and submissively
11	Observing passively and checking on noises and movements of others
12	Responding to internal stimuli and not in close contact with the environment
13	Physical withdrawal and avoidance of involvement in classroom activities

(c) 1978, Robert L. Spaulding

Table 5

Mean Coefficients of the Eight Behavior Styles for Non-Handicapped and Handicapped Children in Teacher Directed Setting for Fall '77 through Winter '79.

		STYLES							
Group	N	A	B	C	D	E	F	G	H
				FALL '77					
Non-handicapped	14	.08	.03	.33	.05	2.50	.31	.91	.28
Handicapped	5	.11	.27	.00	.38	2.15	.09	.79	.43
				SPRING '78					
Non-handicapped	14	.06	.07	.00	.03	3.43	.57	.42	.09
Handicapped	5	.09	.25	.00	.12	2.94	.03	.72	.22
				SUMMER '78					
Non-handicapped	14	.06	.12	.00	.09	2.72	.14	.91	.20
Handicapped	7	.00	.16	.05	.01	2.44	.00	.88	.52
				FALL '78					
Non-handicapped	14	.21	.13	.06	.03	3.09	.10	.74	.19
Handicapped	7	.00	.10	.02	.01	2.86	.05	.95	.17
				WINTER '79					
Non-handicapped	14	.06	.13	.03	.03	2.94	.28	.71	.21
Handicapped	6	.00	.12	.00	.04	2.58	.05	.77	.55

Table 6

Mean Coefficients of the Eight Behavior Styles for Non-Handicapped and Handicapped Children in Teacher Directed Choice Settings for Fall'77 through Winter '79

		STYLES							
Group	N	A	B	C	D	E	F	G	H
				FALL '77					
Non-handicapped	14	.10	.07	.00	.16	.57	.44	1.88	.29
Handicapped	5	.00	.01	.00	.00	1.31	.04	1.79	.34
				SPRING '78					
Non-handicapped	14	.23	.06	.00	.12	1.38	.41	1.71	.06
Handicapped	5	.00	.02	.00	.00	2.16	.11	1.53	.02
				SUMMER '78					
Non-handicapped	14	.00	.34	.00	.00	1.50	1.44	1.86	.00
Handicapped	7	.00	.02	.00	.03	1.25	.54	1.76	.34
				FALL '78					
Non-handicapped	14	.05	.21	.01	.03	3.65	.03	.45	.11
Handicapped	6	.00	.04	.48	.03	4.04	.00	.38	.06
				WINTER '79					
Non-handicapped	14	.14	.09	.00	.00	3.59	.24	.38	.25
Handicapped	6	.00	.24	.00	.01	2.44	.09	1.07	.19

Table 7

Mean Coefficients of the Eight Behavior Styles for Non-Handicapped and Handicapped Children in Program Directed Choice Settings for Fall'77 through Winter '79.

		STYLES							
Group	N	A	B	C	D	E	F	G	H
				FALL '77					
Non-handicapped	14	.17	.06	.00	.05	.54	2.04	1.28	.0
Handicapped	5	.08	.05	.00	.13	1.11	.77	1.65	.0
				SPRING '78					
Non-handicapped	14	.05	.03	.00	.00	.60	2.58	1.00	.0
Handicapped	5	.09	.09	.00	.00	.75	1.18	1.64	.0
				SUMMER '78					
Non-handicapped	14	.02	.06	.00	.02	.61	1.79	1.42	.0
Handicapped	7	.16	.04	.00	.07	.75	1.26	1.58	.0
				FALL '78					
Non-handicapped	14	.21	.11	.20	.05	.73	1.40	1.52	.0
Handicapped	7	.10	.13	.00	.03	.72	.82	1.43	.0
				WINTER '79					
Non-handicapped	14	.09	.02	.00	.00	.79	1.75	1.37	.0
Handicapped	6	.00	.02	.01	.00	1.04	.98	1.65	.0